SAFETY DATA SHEET
Alcohol-Enhanced Flux Remover-ProClean, Aerosol
According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR)

1. Identification

Product identifier
Product name Alcohol-Enhanced Flux Remover-ProClean, Aerosol
Product number MCC-PRO16A, MCC-PRO, MCC-PRO101, MCC-PRO125, MCC-PRO12Y
Synonyms; Common Names "PRO-ProClean Flux Remover"

Recommended use of the chemical and restrictions on use
Restriction on use Cleaning agent.
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet
Supplier MICROCARE LLC
Manufacturer MICROCARE LLC
595 John Downey Drive
New Britain, CT 06051
United States of America
CAGE: OATV9
Tel: +1 800-638-0125, +1 860-827-0626
techsupport@microcare.com

Emergency telephone number
Emergency telephone INFOTRAC 1-800-535-5053 (CANADA and U.S.A.)
1-352-323-3500 (from anywhere in the world)

2. Hazard identification

Classification of the substance or mixture
WHMIS Regulatory Status This product has been classified according to the hazard criteria of the Hazardous Product Regulations and the SDS contains all required information.
Physical hazards Flam. Aerosol 1 - H222
Health hazards Eye Irrit. 2 - H319 Repr. 1A - H360 STOT SE 1 - H370 STOT SE 3 - H336
Environmental hazards Not Classified

Human health Splashes in the eyes may cause redness and irritation. Keep out of the reach of children. See Section 11 for additional information on health hazards.
Physicochemical Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

Hazard pictograms

Signal word

Danger

Hazard statements

H222 Extremely flammable aerosol.
H319 Causes serious eye irritation.
H360 May damage fertility or the unborn child.
H370 Causes damage to organs.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P261 Avoid breathing spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 Get medical advice/ attention if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information

EUH210 Safety data sheet available on request. RCH001a For use in industrial installations only.

Contains

PROPN-2-OL, METHANOL

3. Composition/Information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>PROPN-2-OL</th>
<th>30-60% Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 67-63-0</td>
<td></td>
</tr>
</tbody>
</table>

Classification

Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

<table>
<thead>
<tr>
<th>ETHANOL</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 64-17-5</td>
<td></td>
</tr>
</tbody>
</table>

Classification

Flam. Liq. 2 - H225
### Alcohol-Enhanced Flux Remover-ProClean, Aerosol

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Type</th>
<th>Percentage</th>
<th>CAS Number</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFC-134a Tetrafluoroethane</td>
<td>Press. Gas, Liquefied</td>
<td>10-30%</td>
<td>811-97-2</td>
<td>Simple Asphyxiants - Category 1</td>
</tr>
<tr>
<td>METHANOL</td>
<td>Flam. Liq. 2 - H225</td>
<td>1-5%</td>
<td>67-56-1</td>
<td>Flam. Liq. 2 - H225</td>
</tr>
<tr>
<td>ISOBUTYL METHYL KETONE</td>
<td>Flam. Liq. 2 - H225</td>
<td>0.1-1%</td>
<td>108-10-1</td>
<td>Flam. Liq. 2 - H225</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td>Flam. Liq. 2 - H225</td>
<td>0.1-1%</td>
<td>141-78-6</td>
<td>Flam. Liq. 2 - H225</td>
</tr>
</tbody>
</table>

The full text for all hazard statements is displayed in Section 16.

- **Composition comments**: TSCA: The ingredients of this product are on the TSCA Inventory. The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of CFR 1900.1200
- **Ingredient notes**: Denaturants in Ethanol include Methanol, CAS# 67-56-1; MIBK, CAS# 108-10-1 and Ethyl acetate, CAS# 141-78-6

### 4. First-aid measures

**Description of first aid measures**

**General information**: Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

**Inhalation**
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.

**Ingestion**
Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist.

**Skin contact**
Rinse with water.

**Eye contact**
Rinse with water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Get medical attention if any discomfort continues.

**Protection of first aiders**
First aid personnel should wear appropriate protective equipment during any rescue.

**Most important symptoms and effects, both acute and delayed**

**General information**
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**
A single exposure may cause the following adverse effects: Pain or irritation. Intoxication. Narcotic effect. Muscle weakness. Nausea, vomiting. Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.

**Ingestion**
Due to the physical nature of this product, it is unlikely that ingestion will occur. Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.

**Skin contact**
A single exposure may cause the following adverse effects: Pain. Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.

**Eye contact**
Irritating to eyes.

**Indication of any immediate medical attention and special treatment needed**

**Notes for the doctor**
Treat symptomatically.

**5. Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing media**
The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the hazardous product**

**Specific hazards**
Containers can burst violently or explode when heated, due to excessive pressure build-up. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. Vapours may form explosive mixtures with air.

**Hazardous combustion products**
Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

**Advice for firefighters**
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

Protective actions during firefighting

Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter’s clothing that provides a basic level of protection during chemical incidents is defined by the Canada Occupational Health and Safety Regulations, by provincial guidelines on occupational health and safety or by NFPA standards if applicable.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

Environmental precautions

Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

Methods and material for containment and cleaning up

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

Reference to other sections

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. May cause cancer. May cause genetic defects. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapours and spray/mists.
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

Advice on general occupational hygiene
Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities
Storage precautions
Store away from incompatible materials (see Section 10). Keep away from oxidizing materials, heat and flames. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F.

Storage class
Chemical storage.

Specific end use(s)
The identified uses for this product are detailed in Section 1.

Reference to other sections
Store away from incompatible materials (see Section 10).

8. Exposure controls/Personal protection

Control parameters
Occupational exposure limits

PROPNAN-2-OL
Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m³
Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m³
A4

ETHANOL
Short-term exposure limit (15-minute): ACGIH 1000 ppm 1880 mg/m³
A3

HFC-134a Tetrafluoroethane
Long-term exposure limit (8-hour TWA): OES 4240 mg/m³

METHANOL
Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 262 mg/m³
Short-term exposure limit (15-minute): ACGIH 250 ppm 328 mg/m³
Sk

ISOBUTYL METHYL KETONE
Long-term exposure limit (8-hour TWA): ACGIH 20 ppm 82 mg/m³
Short-term exposure limit (15-minute): ACGIH 75 ppm 307 mg/m³
A3

ETHYL ACETATE
Long-term exposure limit (8-hour TWA): ACGIH 400 ppm 1440 mg/m³
ACGIH = American Conference of Governmental Industrial Hygienists.
A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.
A4 = Not Classifiable as a Human Carcinogen.
Sk = Danger of cutaneous absorption.

Exposure controls

Protective equipment

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.
A4 = Not Classifiable as a Human Carcinogen.
Sk = Danger of cutaneous absorption.
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

### Appropriate engineering controls
Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.

### Eye/face protection
Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Hand protection
Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.9), and any relevant provincial regulation relating to health and safety at work. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

### Other skin and body protection
Wear appropriate clothing to prevent any possibility of skin contact.

### Hygiene measures
Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

### Respiratory protection
Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Full face mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Half mask and quarter mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work.

### Environmental exposure controls
Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
</tr>
<tr>
<td><strong>Colour</strong></td>
</tr>
<tr>
<td><strong>Odour</strong></td>
</tr>
<tr>
<td><strong>Odour threshold</strong></td>
</tr>
<tr>
<td><strong>pH</strong></td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
</tr>
<tr>
<td><strong>Initial boiling point and range</strong></td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
</tr>
<tr>
<td><strong>Evaporation factor</strong></td>
</tr>
</tbody>
</table>
## Alcohol-Enhanced Flux Remover-ProClean, Aerosol

<table>
<thead>
<tr>
<th>Flammability (solid, gas)</th>
<th>No information available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Upper flammable/explosive limit: 12.7 % (V) Lower flammable/explosive limit: 2.0 % (V)</td>
</tr>
<tr>
<td>Other flammability</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>5.2 kPa @ 20°C</td>
</tr>
<tr>
<td>Vapour density</td>
<td>1.82</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.79</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Completely soluble in water.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>There are no chemical groups present in the product that are associated with oxidizing properties.</td>
</tr>
<tr>
<td>Comments</td>
<td>Aerosol</td>
</tr>
<tr>
<td>Global Warming Potential (GWP)</td>
<td></td>
</tr>
<tr>
<td>Surface tension</td>
<td></td>
</tr>
<tr>
<td>Refractive index</td>
<td>No information available.</td>
</tr>
<tr>
<td>Particle size</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Volatility</td>
<td>100%</td>
</tr>
<tr>
<td>Saturation concentration</td>
<td>No information available.</td>
</tr>
<tr>
<td>Critical temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Volatile organic compound</td>
<td>This product contains a maximum VOC content of 785 g/litre.</td>
</tr>
<tr>
<td>Heat of vaporization (at boiling point), cal/g (Btu/lb)</td>
<td></td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Reactivity</th>
<th>See the other subsections of this section for further details.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>The following materials may react strongly with the product: Oxidizing agents.</td>
</tr>
</tbody>
</table>
## Alcohol-Enhanced Flux Remover-ProClean, Aerosol

### Conditions to avoid
Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurized container: may burst if heated.

### Materials to avoid
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

### Hazardous decomposition products
Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

### 11. Toxicological information

#### Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicological Effect</th>
<th>Data Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - oral</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Notes (oral LD₅₀)</td>
<td></td>
</tr>
<tr>
<td>ATE oral (mg/kg)</td>
<td>6,274.51</td>
</tr>
<tr>
<td>Acute toxicity - dermal</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Notes (dermal LD₅₀)</td>
<td></td>
</tr>
<tr>
<td>ATE dermal (mg/kg)</td>
<td>18,823.53</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Notes (inhalation LC₅₀)</td>
<td></td>
</tr>
<tr>
<td>ATE Inhalation (vapours mg/l)</td>
<td>188.24</td>
</tr>
<tr>
<td>ATE Inhalation (dusts/mists mg/l)</td>
<td>31.37</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Animal data</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Genotoxicity - in vitro</td>
<td>May cause genetic defects.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>May cause cancer.</td>
</tr>
<tr>
<td>IARC carcinogenicity</td>
<td>Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td>Reproductive toxicity - fertility</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity - development</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure</td>
<td>STOT SE 3 - H336 May cause drowsiness or dizziness. STOT SE 2 - H371 May cause damage to organs.</td>
</tr>
</tbody>
</table>
**Alcohol-Enhanced Flux Remover-ProClean, Aerosol**

**Target organs**
- Central nervous system

**Specific target organ toxicity - repeated exposure**
- **STOT - repeated exposure**: Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**
- Based on available data the classification criteria are not met.

**General information**
- May cause cancer after repeated exposure. Risk of cancer depends on duration and level of exposure. May cause genetic defects. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**
- A single exposure may cause the following adverse effects: Pain or irritation. Intoxication. Narcotic effect. Muscle weakness. Nausea, vomiting.

**Ingestion**
- Due to the physical nature of this product, it is unlikely that ingestion will occur.

**Skin contact**
- A single exposure may cause the following adverse effects: Pain.

**Eye contact**
- Irritating to eyes.

**Route of exposure**
- Ingestion Inhalation Skin and/or eye contact

**Target organs**
- Central nervous system

**Toxicological information on ingredients**

**PROPAN-2-OL**

**Carcinogenicity**
- **IARC carcinogenicity**: IARC Group 3 Not classifiable as to its carcinogenicity to humans.
- **NTP carcinogenicity**: Not listed.

**ETHANOL**

**Acute toxicity - inhalation**
- **Acute toxicity inhalation (LC₅₀ vapours mg/l)**: 20,000.0
- **ATE inhalation (vapours mg/l)**: 20,000.0

**HFC-134a Tetrafluoroethane**

**Other health effects**
- There is no evidence that the product can cause cancer.

**Acute toxicity - inhalation**
- **Acute toxicity inhalation (LC₅₀ gases ppmV)**: 567,000.0

**Species**
- Rat

**ATE inhalation (gases ppmV)**
- **567,000.0**

**Inhalation**
- Vapours irritate the respiratory system. May cause coughing and difficulties in breathing.
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

**Ingestion**
May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

**Skin contact**
May cause allergic contact eczema. Contact with liquid form may cause frostbite.

**Eye contact**
May cause temporary eye irritation.

### METHANOL

#### Acute toxicity - oral

**Notes (oral LD₅₀)**
Acute Tox. 3 - H301 Toxic if swallowed.

**ATE oral (mg/kg)**
100.0

#### Acute toxicity - dermal

**Notes (dermal LD₅₀)**
Acute Tox. 3 - H311 Toxic in contact with skin.

**ATE dermal (mg/kg)**
300.0

#### Acute toxicity - inhalation

**Notes (inhalation LC₅₀)**
Acute Tox. 3 - H331 Toxic if inhaled.

**ATE inhalation (vapours mg/l)**
3.0

**ATE inhalation (dusts/mists mg/l)**
0.5

**Skin corrosion/irritation**
Based on available data the classification criteria are not met.

**Serious eye damage/irritation**
Based on available data the classification criteria are not met.

**Respiratory sensitization**
Based on available data the classification criteria are not met.

**Skin sensitization**
Based on available data the classification criteria are not met.

**Germ cell mutagenicity**
Based on available data the classification criteria are not met.

**Genotoxicity - in vitro**
Based on available data the classification criteria are not met.

**Carcinogenicity**
Based on available data the classification criteria are not met.

**IARC carcinogenicity**
None of the ingredients are listed or exempt.

**Reproductive toxicity**
Based on available data the classification criteria are not met.

**Reproductive toxicity - fertility**
Based on available data the classification criteria are not met.

**Reproductive toxicity - development**
Based on available data the classification criteria are not met.

**Specific target organ toxicity - single exposure**

**STOT - single exposure**
STOT SE 1 - H370 Causes damage to organs.
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**

Based on available data the classification criteria are not met.

**General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**

A single exposure may cause the following adverse effects: Drowsiness, dizziness, disorientation, vertigo. Unconsciousness. High concentrations may be fatal.

**Ingestion**

May cause stomach pain or vomiting. May cause severe internal injury.

**Skin contact**

A single exposure may cause the following adverse effects: Pain.

**Eye contact**

No specific symptoms known.

**Route of exposure**

Ingestion Inhalation Skin and/or eye contact

**Target organs**

No specific target organs known.

**ISOBUTYL METHYL KETONE**

**Carcinogenicity**

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

**12. Ecological information**

**Ecotoxicity**

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

**Ecological information on ingredients**

**METHANOL**

**Ecotoxicity**

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

**Toxicity**

Based on available data the classification criteria are not met.

**Ecological information on ingredients**

**PROPAN-2-OL**

**Acute aquatic toxicity**

**Acute toxicity - fish** LC₅₀, 96 hours: 9,640 mg/l, Fish

**Acute toxicity - aquatic invertebrates** EC₅₀, 48 hours: 5102 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** IC₅₀, 72 hours: >2,000 mg/l, Algae

**ETHANOL**

**Acute aquatic toxicity**

**Acute toxicity - fish** LC₅₀, 96 hours: >10,000 mg/l, Fish
### Alcohol-Enhanced Flux Remover-ProClean, Aerosol

#### Acute toxicity - aquatic invertebrates
ACs, 48 hours: 7,800 mg/l, Daphnia magna

#### Acute toxicity - aquatic plants
, 96 hours: 1000 mg/l, Freshwater algae

---

#### HFC-134a Tetrafluoroethane

**Acute aquatic toxicity**

- **Acute toxicity - fish**
  \[ \text{LC}_{50}, \text{96 hours}: 450 \text{ mg/l}, \text{Fish} \]

- **Acute toxicity - aquatic invertebrates**
  \[ \text{EC}_{50}, \text{48 hours}: 980 \text{ mg/l}, \text{Daphnia magna} \]

---

#### METHANOL

**Toxicity**

Based on available data the classification criteria are not met.

**Acute aquatic toxicity**

- **Acute toxicity - fish**
  \[ \text{LC}_{50}, \text{96 hours}: >100 \text{ mg/l}, \text{Pimephales promelas (Fat-head Minnow)} \]

- **Acute toxicity - aquatic invertebrates**
  \[ \text{EC}_{50}, \text{48 hours}: >10000 \text{ mg/l}, \text{Daphnia magna} \]

---

#### Persistence and degradability

The degradability of the product is not known.

---

#### Ecological information on ingredients

##### ETHANOL

**Persistence and degradability**

The product is expected to be biodegradable.

---

##### METHANOL

**Persistence and degradability**

The degradability of the product is not known.

---

### Propylene glycol

**Bioaccumulative potential**

No data available on bioaccumulation.

**Partition coefficient**

No information available.

---

### PROPO-2-OL

**Partition coefficient**

\[ : 0.05 \]

---

### METHANOL

**Bioaccumulative potential**

Bioaccumulation is unlikely.

**Partition coefficient**

No information available.

---

### HFC-134a Tetrafluoroethane

**Partition coefficient**

\[ \text{Pow}: 1.06 \]
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

**METHANOL**

**Bioaccumulative potential**  No data available on bioaccumulation.

**Partition coefficient**  : -0.77

**Mobility in soil**

**Mobility**  The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

**Ecological information on ingredients**

**ETHANOL**

**Mobility**  The product is soluble in water.

**METHANOL**

**Mobility**  No data available.

**Other adverse effects**

**Other adverse effects**  None known.

**Ecological information on ingredients**

**METHANOL**

**Other adverse effects**  None known.

13. Disposal considerations

**Waste treatment methods**

**General information**  The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

**Disposal methods**  Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents.

14. Transport information

**UN number**

**UN No. (IMDG)**  1950

**UN No. (ICAO)**  1950

**UN proper shipping name**

**Proper shipping name (TDG)**  LIMITED QUANTITY

**Proper shipping name (IMDG)**  UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

**Proper shipping name (ICAO)**  UN1950, AEROSOLS, FLAMMABLE, 2.1, LIMITED QUANTITY

**Proper shipping name (DOT)**  LIMITED QUANTITY
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

Transport hazard class(es)
IMDG class 2.1 LIMITED QUANTITY
ICAO class/division 2.1 LIMITED QUANTITY

Packing group
TDG packing group N/A
IMDG packing group N/A
ICAO packing group N/A
DOT packing group N/A

Environmental hazards
Environmentally hazardous substance/marine pollutant No.

Special precautions for user
EmS F-D, S-U

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

Inventories
Canada – DSL/NDSL
DSL

US - TSCA
Present.

US – TSCA 12(b) Export Notification
Not listed.

16. Other information

Classification abbreviations and acronyms
Aerosol = Aerosol
Carc. = Carcinogenicity
Eye Irrit. = Eye irritation
Muta. = Germ cell mutagenicity
STOT SE = Specific target organ toxicity-single exposure

Training advice
Only trained personnel should use this material.

Revision comments
NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 2021-05-25
Revision 78
Supersedes date 2021-05-21
SDS number AEROSOL - PRO
Alcohol-Enhanced Flux Remover-ProClean, Aerosol

<table>
<thead>
<tr>
<th>Hazard statements in full</th>
<th></th>
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<tbody>
<tr>
<td>H222 Extremely flammable aerosol.</td>
<td></td>
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<tr>
<td>H225 Highly flammable liquid and vapour.</td>
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<tr>
<td>H280 Contains gas under pressure; may explode if heated.</td>
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<tr>
<td>H301 Toxic if swallowed.</td>
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<tr>
<td>H311 Toxic in contact with skin.</td>
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<tr>
<td>H319 Causes serious eye irritation.</td>
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<tr>
<td>H331 Toxic if inhaled.</td>
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<tr>
<td>H332 Harmful if inhaled.</td>
<td></td>
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<tr>
<td>H335 May cause respiratory irritation.</td>
<td></td>
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<tr>
<td>H336 May cause drowsiness or dizziness.</td>
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<tr>
<td>H360 May damage fertility or the unborn child.</td>
<td></td>
</tr>
<tr>
<td>H370 Causes damage to organs.</td>
<td></td>
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<tr>
<td>May displace oxygen and cause rapid suffocation.</td>
<td></td>
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</tbody>
</table>

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.